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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,845	10/12/2001	Yun Ju Choi	K-0332	7364
34610	7590	07/28/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			LEE, ANDREW CHUNG CHEUNG	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/974,845

Applicant(s)

CHOI, YUN JU

Examiner

Andrew C. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>Nov 19, 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s)/subject matters mentioned in the description: Referring to Fig. 1A and Fig 1B, the subject matters 'IB_REP' and SEG_POS' have been disclosed in the specification (page 3); however, they are not indicated expressly in the diagrams. Regarding Fig. 2, the subject matter SFN counter as indicated on page 3, paragraph [008]; "scheduling parameters" in response to a control signal as mentioned in the specification, on page 8, paragraph [025], line 7, it is not disclosed expressly in the drawing. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "preset time

interval is 20ms" as disclosed in claims 1, 7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to under 37 CFR 1.71, as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. For example, the following items are not understood: SFNtx%SIB_REP (page 4, line 2 equation (1)) and

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tempSFNtx%4096 (Page 10, line 1) and (SFNtx (i) + SEG-POS)%4096 (page 11, line 4, equation (4)).

Applicant is required to submit an amendment which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

A shortened statutory period for reply to this action is set to expire ONE MONTH or THIRTY DAYS, whichever is longer, from the mailing date of this letter.

4. The disclosure is objected to because of the following informalities:
 - Line numbering for the specification is required, or consecutively numbered using Arabic numerals so as to unambiguously identify each paragraph. The number should be consisted of at least four numerals enclosed in square brackets, including leading zeros (e.g., [0001]). (see 37 CFR 1.52).
 - Page 1, paragraph [002], line 3, IMT-200 is a typo.
 - Page 1, paragraph [004] space is missing for the term RSIM(RRC System Information Message).
 - Page 2, paragraph [005], the disclosed subject matter 'each RSIM has 256 bits' while the Fig. 1B indicates 246 bits. Which subject matter is valid?
 - Pages 2, 3, the subject matters, "SIB_REP", "SIB_POS" have been used often; however, the terms, "IB_REP", and "SEG_POS" have been also referred to. Are they claimed the same subject matters?

- Page 3, paragraph [007], line 2, a space is missing for the term “theRSIMs”.
- Page 4, paragraph [008], line 4, a space is missing for the term “theRSIMs”
- Page 4, paragraph [008], the meaning of % in equation 1, on page 4, is so incomprehensible. Clarification for the equation is needed.
- Page 4, paragraph [009], page 4, line 3 – 4, equation (2) is mentioned, but it is not shown or indicated.
- Page 4, paragraph [012], page 4, line 6, a space is missing for the term “aRSIM” Page 1, paragraph [004] space is missing for the term RSIM(RRC System Information Message).
- Page 11, equation 4, the term “SEG-POS” should be corrected as SEG_POS”

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 6, 9, 11, 16, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding claim 6, the equation cited $SFN_{tx}(i+1) = (SFN_{tx}(i) +$

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SEG_POS) % 4096 ($0 \leq i \leq M - 1$). The term % 4096 is so incomprehensible.

Referring to claim 9, the subject matter in the algorithm "Round(modify_time%IB_REP)" is incomprehensible. Regarding claims 11 and 16, the terms SIB_REP, SIB_POS as disclosed in claim 11, and IB_REP, SEG_POS as disclosed in claim 11, refer to the same subject matter. They are very confused as disclosed in the specification.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4, 13, 3, 8, 5, 10, 12, 14, 15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osawa (U.S. Patent No. 5621732) in view of Park et al. (U.S. Patent No. 6853852 B1).

Regarding claims 1, 4, 13, Osawa discloses the limitation of (a) storing RSIMs(Radio resource controller System Information Messages) generated by information block segments from a radio network controller in a memory (column 4, lines 63 – 65); (b) calculating transmission time points of the RSIMs to the air (Fig. 12, element 511; column 9, 1 – 23); (c) queuing the stored RSIMs in an order of transmission based on the calculated transmission time points with reference to the current time point (column 9, lines 14 – 18); (d) comparing the current time point with

the transmission time point of the RSIM to be transmitted the earliest in the queued RSIMs at every preset time interval (column 9, lines 24 – 35); and, (e) transmitting the RSIMs to the air if the current time point and the transmission time point of the RSIM are the same as a result of the comparison (column 5, lines 19 – 27). Osawa does not disclose expressly a method for implementing a system information broadcasting function in an asynchronous mobile communication system. Park et al. discloses the limitation of a method for implementing a system information broadcasting function in an asynchronous mobile communication system (Abstract, lines 1 – 3; Fig. 1B, column 1, lines 53 – 66). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Osawa to include a method for implementing a system information broadcasting function in an asynchronous mobile communication system such as that taught by Park et al. in order to provide a method and apparatus for transmitting a message between a synchronous core network to an asynchronous mobile station in a next-generation mobile telecommunication system (as suggested by Park et al., see column 6, lines 12 – 16).

Regarding claims 3, 8, Osawa discloses the limitation of a method as claimed wherein the memory is a channel card (column 4, lines 26 – 28, Fig. 11, column 9, lines 1 – 3).

Regarding claims 5, 10, 12, 14, 15, 17, Osawa discloses the limitation of a method as claimed further comprising the steps of: whenever one RSIM is transmitted

to the air at fixed intervals, calculating a next transmission time point of the transmitted RSIM; and, forming a new queue of RSIMs taking the next transmission time point (column 9, lines 7 – 27).

9. Claims 2, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osawa (U.S. Patent No. 5621732) and Park et al. (U.S. Patent No. 6853852 B1) as applied to claim 1, 4, 13, 3, 8, 5, 10, 12, 14, 15, 17 above, and further in view of the article by Lee et al. (IEEE Transactions on Consumer Electronic, Vol. 46, No. 4, November 2000).

Regarding claims 2, 7, both Osawa and Park et al. do not disclose expressly a method as claimed wherein the preset time interval is 20ms. The article by Lee et al. discloses the limitation of a method as claimed wherein the preset time interval is 20ms (page 1027, table 1, the element "Frame size 20 ms").). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Park et al. and Osawa to include a method as claimed wherein the preset time interval is 20ms such as that taught by the article (Lee et al.) in order to provide the key characteristics of RTT used in the developed IMT-2000 STP (as suggested by Lee et al, see page 1026, column 2).

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Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACL

July 23, 2005


Ajit Patel
Primary Examiner